CLAIMS:

- An image sensor clock driver system for reducing energy consumption comprising:
- (a) a charge-coupled device having at least two gates for receiving an electrical signal;
- (b) at least first and second electrical buses each having a unique voltage;
- (c) a first switch on each of the gates that connects each gate to any one of the electrical buses or to a neutral position; and
- (d) a second switch to connect the two gates together for reducing power consumption by transferring charge from one gate to the other gate at a time when the first switches are in a neutral position.
- The image sensor as in claim 1, wherein the first and second switches are transistors.
- A method for reducing energy consumption in image sensors, the method comprising the steps of:
- (a) providing a charge-coupled device having at least two gates for receiving an electrical signal;
- (b) providing at least first and second electrical buses each having a unique voltage,
- (c) providing a first switch on each of the gates that connects each gate to any one of the electrical buses or to a neutral position; and
- (d) providing a second switch to connect the two gates together for reducing power consumption by transferring charge from one gate to the other gate at a time when the first switches are in a neutral position.